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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,455	12/26/2001	Takayoshi Oyamada	0649-0814P	2939
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EXAMINER				
CHEA, THORL				
ART UNIT		PAPER NUMBER		
1752				

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/025,455

Applicant(s)

OYAMADA ET AL.

Examiner

Thorl Chea

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet, 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet, 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as obvious over the combination of EP1004930 (EP'930) and Matsumoto et al (Matsumoto). The EP'930 discloses a photothermographic material containing non-photosensitive organic silver salt grain similar to that of the claimed invention. The grain having aspect ratio (AR) of at least 3; the average of the average grain diameter of 0.01 to 0.8  $\mu\text{m}$ ; the average of the needle ratio of said grain measure from the principal plane direction ( $\text{Needle ratio} = (\text{MxLNG})/(\text{WIDTH})$ ) is not less than 1.1 and less than 10 (page 3, and page 4). On page 5, paragraph [0052 to 0053], the silver behenate, silver arachidate, and/or silver stearate are preferred organic silver salt. Matsumoto in column 17 lines 10-15 discloses "silver behenate is the most preferred in terms of whiteness and light stability. Silver behenate also has excellent moisture resistance, and can be used in combination with a reducing agent having a relatively weak reducing ability".

It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to would have selected silver benehenate having grains structure within the scope taught in EP'930 to provide the non-photosensitive organic silver salt grains claimed in the present claimed invention. The worker of ordinary skill in the art would have selected the silver behenate because of because of its excellent moisture resistance and the its having a relatively

weak reducing ability recognized in Matsumoto and the non-photosensitive organic silver salt having grains structure taught in EP'930 provides photothermographic material with high sensitivity, reduced image defects as well as low fog.

The limitation of claims 6-8 are related to the claiming of a material by a process. "(E)ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or obvious from a product of prior art, the claim is unpatentable even though the prior art product was made by different process." In re Thorpe 777 F.2d 695, 698, 227 USPQ 694, 966 (Fed. Cir. 1985).

3. Claims 1-13 are rejected under 35 U.S.C. 103(a) as obvious over the combination of EP0962812 (EP'812) and Matsumoto et al (Matsumoto).

EP'812 discloses a heat-developable material containing having fatty acid silver salt particle having the average equivalent-sphere diameter from 0.1 to 0.8  $\mu\text{m}$ ; the average ratio of long sides/short sides in main planes of 1 to 4; the aspect ratio of 2 to 30. The preferred aliphatic carboxylic acids include cerotic acid, lignoceric acid, behenic acid, erucic acid, arachidic acid, stearic acid, ....camphoric acid and mixture thereof. See page 5, paragraph [0035]. The preparation of silver behenate is shown on page 25-26, especially Table 2. The material having one or more layer is shown on page 21, paragraph [0187]. Matsumoto in column 17 lines 10-15 discloses that "silver behenate is the most preferred in terms of whiteness and light stability. Silver behenate also has excellent moisture resistance, and can be used in combination with a reducing agent having a relatively weak reducing ability". It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to would have selected

silver behenate having grains structure within the scope taught in EP'930 to provide the non-photosensitive organic silver salt grains claimed in the present claimed invention. The worker of ordinary skill in the art would have selected the silver behenate because of its excellent moisture resistance and its having a relatively weak reducing ability recognized in Matsumoto and the non-photosensitive organic silver salt having grains structure taught in EP'930 provides photothermographic material with high sensitivity, reduced image defects as well as low fog.

The limitation of claims 6-8 is related to the claiming of a material by a process. "(E)ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or obvious from a product of prior art, the claim is unpatentable even though the prior art product was made by different process." *In re Thorpe* 777 F.2d 695, 698, 227 USPQ 694, 966 (Fed. Cir. 1985).

#### *Response to Arguments*

4. Applicant's arguments filed April 11, 2003 have been fully considered but they are not persuasive. The invention in claim 1 encompasses any type of a non-photosensitive organic silver halide that has silver stearate content of 1 mol % or less. The composition of non-photosensitive organic silver salt in claim 13 has silver stearate of 1 mol % or less, silver arachidate content of 6 mol % or less, and silver behenate content of 90 to 100 mol% per mole of the non-photosensitive organic silver salt. Both grains in claims 1 and 13 has a length/width ratio to 1-9; an aspect ratio of 1.1 to 30; and an equivalent-square diameter of 0.05 to 1 micron.

The non-photosensitive silver salt grains of the prior art such as EP'812 has a ratio of long side/short side from 1 to 4; average aspect ratio from 2 to 30; and equivalent sphere diameter from 0.1 to 0.8 micron. The dimensions of the prior art overlaps of those claimed in the present invention. The non-photosensitive organic silver salt of the EP'812 includes fatty acid including long-chain aliphatic carboxylic acids each having 10 to 30 carbon atoms, and preferably 12-26 carbon atom. The long chain aliphatic carboxylic acid such as behenic acid, stearic acid or arachidic acid is recited therein (EP'812, page 5 last paragraph). EP'812 on page 25, lines 15-20 exemplified the use behenic acid, trade name: Edenor C-22-85R manufactured by Henckel Co in the preparation of non-light insensitive organic silver salt. No other aliphatic carboxylic acids including stearic acid or arachidic acid are mentioned. This use of behenic acid would produce higher content of silver behenate which would encompasses the scope of silver stearate of 1 mole % or less and silver arachidate of 6 mole % or less presented in claim 1 and 13.

The applicants argument is related to the process of making the non-photosensitive organic silver salt, but fails to show whether the use of behenic acid having trade name discloses in the EP'812 contains the silver stearate and silver arachidate claimed in the present claimed invention. The Declaration under 37 CFR 1.132 fails to show the preparation of non-photosensitive organic silver salt using behenic acid taught in the prior art of record, namely the EP references. Moreover, the results in the Declaration is not commensurate with the scope of the claimed invention. The scope of claim 1 encompasses any type of known non-photosensitive organic silver salt excluding 11 mole % or less silver stearate while the Declaration is related to the more purified silver behenate. Moreover, silver behenate has been known in the art as having excellent moisture resistance and the its having a relatively weak reducing ability such as

recognized in Matsumoto, and the worker of ordinary skill in the art would have select the silver behenate among the to form a non-photosensitive organic silver salt taught having structure taught in EP'930 or EP'812 since the non-photosensitive organic silver salt having grains structure taught in EP'930 or EP'812 provides photothermographic material with high sensitivity, reduced image defects as well as low fog. Accordingly, the invention as claimed would have been found prima facie obvious over the applied prior art of record. The combination of fatty acid silver salt such as silver arachidate in combination with silver behenate in claim 13 would have been found prima facie obvious to the worker of ordinary skill in the art. It is prima facie obvious to combine two compositions each of which taught by the prior art to be useful for the same purpose in order to form a third composition to be used for the same purpose. In re Kerhoven, 205 USPQ 1069, 1072 (CCPA 1980).

#### *Conclusion*

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571)272-1328. The examiner can normally be reached on M-F (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on (571)272-1385. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Tchea   
January 2, 2004

  
Thorl Chea  
Primary Examiner  
Art Unit 1752